

EXHIBIT

A

Excellent. Thank you.

Sent from my iPhone

On Jan 30, 2014, at 11:11 AM, "Hilary B. Miller" <hilary@miller.net> wrote:

Abstract

The discourse surrounding payday loans has recently focused sharply on consumers' propensity to "roll over" these loans, which are typically two-week, very-high-cost advances. The industry's principal regulator has suggested that this sustained usage may be harmful to consumers. Exploiting interstate differences in rollover regulation, and using administrative data supplied by three lenders for 28,000 borrowers that have been matched to credit scores from a national credit reporting agency, I explore the effectiveness of various regulatory schemes in improving consumer outcomes in the years following initial payday borrowing. I also evaluate the effects of sustained payday-loan usage irrespective of regulatory scheme. I find that, while state regulation has a small effect on longer-term usage patterns, consumers whose borrowing is unrestricted by regulation fare better than consumers in the most restrictive states, after controlling for initial financial status. I also find that longer-term borrowers (three months or more) have better outcomes than consumers whose borrowing is concluded in one month or less. These findings raise significant policy questions and suggest the appropriateness of further study of actual consumer outcomes before the imposition of new regulation at the federal level.

//

-----Original Message-----

From: Hilary B. Miller [hilary@miller.net]

Received: Thursday January 30, 2014, 11:09 AM

To: Priestley, Jennifer Lewis [jpriestl@kennesaw.edu]

Subject: Abstract - First Pass - Subject to Further Thought and Your Input

Abstract

EXHIBIT

B

----- Original Message -----

From: "Hilary B. Miller" <info@creditresearch.org>

To: jpriestl@kennesaw.edu

Sent: Friday, October 25, 2013 11:38:26 AM

Subject: New Project(s)

Dear Prof. Priestley:

I understand that you have been working with Michael Flores on an online-lending project. If these kinds of projects interest you, we have more projects, access to large administrative datasets, and a budget. Would you please give me a call?

Hilary Miller

--

Hilary B. Miller

Chairman of the Board

Consumer Credit Research Foundation

500 West Putnam Avenue - Suite 400

Greenwich, Connecticut 06830-6096

(203) 399-1320 (voice)

(203) 517-6859 (cell)

(914) 206-3727 (fax)

info@creditresearch.org

EXHIBIT

C

----- Original Message -----

From: "Hilary B. Miller" <hilary@milller.net>

To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>

Sent: Tuesday, October 29, 2013 4:52:37 PM

Subject: RE: New Project(s)

Jennifer --

As we discussed, we are interested in answering some of the "\$64 questions" about payday lending, namely whether: (a) variation in state rollover regulation affects borrower welfare outcomes, and (b) variation in rollover usage affects borrower welfare outcomes.

To answer these questions, I have a large file of administrative data (38,000 borrower histories) from three storefront lenders that has been matched with 300 variables from TransUnion.

These data have been in the hands of a junior investigator for several months, and I have pulled the plug on this project because it was not progressing satisfactorily and it was impossible to get even professionals (let alone policymakers) to make sense out of her choice of methodology.

I would like to start from scratch on the analysis and produce two papers (or possibly one consolidated paper) of academic quality, peer-reviewable, that would respond to these issues. In my model, you would be the PI and would publish the paper under your name. We are here to help but want the paper to be yours. I can give you the work product of the now-terminated investigator and you can use it as a starting point.

We are on a relatively short timetable and need to have a finished paper by the end of February, no fooling.

I have a budget that can support a decent stipend and defray any expenses.

If you want to look at some related work, you might look

at Kaufman

(2013), <http://www.federalreserve.gov/pubs/feds/2013/201362/201362pap.pdf>, and Bhutta et al.

(2012), <http://ssrn.com/abstract=2160947>. We modeled the data collection for this project on Bhutta. Kaufman is hot off the presses.

Please give this some thought, and then let's speak later in the week about your interest and what you would need to make this worth your while. I should be in my office each day.

Regards,

Hilary

(contact info below)

-----Original Message-----

From: Jennifer Lewis Priestley
[<mailto:jpriestl@kennesaw.edu>]

Sent: Friday, October 25, 2013 11:46 AM

To: Hilary B. Miller

Subject: Re: New Project(s)

Hi Hilary - pleasure to speak with you.

My cell number is [404-229-3216](tel:404-229-3216)

My office number is [770-423-6107](tel:770-423-6107)

Look forward to hearing from you next week. :)

Jennifer Lewis Priestley, MBA, Ph.D.

Associate Professor of Statistics

Director, Center for Statistics and Analytical Services

faculty page: <http://www.science.kennesaw.edu/~jpriestl/>

department page: <http://math.kennesaw.edu/> center

page: <http://www.kennesaw.edu/csas/> what would dagny do?

EXHIBIT

D

Just let me know when to expect the full dataset. :)

Jennifer Lewis Priestley, MBA, Ph.D.

Associate Professor of Statistics

Director, Center for Statistics and Analytical Services

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department page: <http://math.kennesaw.edu/>

center page: <http://www.kennesaw.edu/csas/>

what would dagny do?

From: "Hilary Miller" <echosign@echosign.com>

To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>

Sent: Wednesday, November 6, 2013 4:25:52 PM

Subject: NDA Re Consumer Credit Research Foundation - Revised (between Law offices of Hilary B. Miller and Jennifer Lewis Priestley) is Signed and Filed!

NDA Re Consumer Credit
Research Foundation -
Revised (between Law
offices of Hilary B. Miller
and Jennifer Lewis
Priestley) is Signed and
Filed!

From: Hilary Miller (Law offices of Hilary B. Miller)
To: Jennifer Lewis Priestley

Attached is a final copy of NDA Re Consumer Credit
Research Foundation - Revised.

Copies have been automatically sent to all parties to
the agreement.

You can view [a copy](#) in your EchoSign account.

Why use EchoSign:

- Exchange, Sign, and File Any Document. In Seconds!
- Set-up Reminders. Instantly Share Copies with Others.
- See All of Your Documents, Anytime, Anywhere.

To ensure that you continue receiving our emails, please add echosign@echosign.com to your address book or safe list.

EXHIBIT

E

From: "Hilary B. Miller" <hilary@millers.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Tuesday, November 5, 2013 8:43:09 AM
Subject: RE: Payday File Layout

Jennifer —

I think this is pretty close as an overview. I don't think you need to modify your summary, but I want to give you some additional thoughts that should inform your design and methodology:

To understand the importance of this paper and what I visualize as its contribution to science, it's worth viewing Bhutta et al. (and nearly all of its predecessor science) as looking at mean effects; that is, Bhutta determines that users *as a whole* aren't any better or worse off as a result of using payday loans. This makes perfect sense, as he explains, because the loans are small and the borrowers were in pretty bad financial shape to begin with. But we know, or at least suspect, that there is a distribution of outcomes. Okay, we know it. For most borrowers, having a payday loan either makes little difference or is welfare-enhancing. But there is that pesky left tail. Policymakers are appropriately focused on the left tail. They want to know: what do those people look like, and how did they get there? So, we'd like to take a deeper dive into how heavy users differ from others, both in terms of their welfare outcomes, as well as whether it is possible to identify loan applicants at the pre-loan stage who have a propensity to "stuck" in the product for a long time.

(Interestingly, this latter discrimination function is not a traditional role of credit scoring, but it is perceived by policymakers as a function of "underwriting." We'll talk more about that issue at the paper-writing stage.)

These are basically subsidiary questions that need to be addressed regarding issue #2, not entirely separate ones.

Please do go ahead and send me the contract. We'll send you an NDA, which I will try to get out later [this morning](#). I have all the data here and can transmit it to you immediately upon NDA execution.

Hilary

EXHIBIT

F

----- Original Message -----

From: "Hilary B. Miller" <hilary@miller.net>

To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>

Sent: Sunday, November 3, 2013 3:07:09 PM

Subject: Payday File Layout

Jennifer --

Here is the file layout you requested. The raw files are fixed-field files which were imported into Stata. Each discrete record represents a single loan transaction (there may be multiple records per individual). The customer data are anonymized (TransUnion replaces SSNs with unique individual identifiers).

Hilary

Hilary B. Miller

500 West Putnam Avenue - Suite 400

Greenwich, CT 06830-6096

(203) 399-1320 voice

(203) 517-6859 cell

(914) 206-3727 fax

hilary@miller.net

(sent from laptop)

EXHIBIT

G

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]

Received: Sunday December 1, 2013, 11:48 AM

To: Hilary B. Miller [hilary@miller.net]

Subject: Re: Checking In

Hi Hilary - I have some interesting interim results that I would like to share with you - can we set up some time to review an interim (work-in-progress) document? **Thursday** works particularly well for me between 9 and 12 - let me know if that time works well for you. I will get the doc to you in advance of the call.

Jennifer Lewis Priestley, MBA, Ph.D.

Associate Professor of Statistics

Director, Center for Statistics and Analytical Services

faculty page: <http://www.science.kennesaw.edu/~jpriestl/>

department page: <http://math.kennesaw.edu/>

center page: <http://www.kennesaw.edu/csas/>

what would dagny do?

EXHIBIT

H

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, December 4, 2013 7:58:46 PM
Subject: RE: Checking In

Okay — I see.

This is a useful first step and considerably more detail about the components of credit scores than I was expecting.

So, this is really “Part 1,” which is scores as the LHS variable and regulation on the right. “Part 2” is scores on the left and actual rollover behavior on the right.

When we speak [tomorrow](#), I'd like to convince you that we need to explore changes in credit scores for individual borrowers before and after borrowing — not within-state changes in scores over time — as the dependent variable. If you have, in fact, done this, it's not clear, but I don't think you have. The purpose of this method of data collection was to set up before-and-after snapshots for individual borrowers. If you have, as I suspect, just tracked scores over time vs. regulatory scheme, then I see an issue with possibly confounding variables between states, including the fact that some were more deeply harmed by the recession. It's really important to get the concept right before we start the analysis, and for now I'd rather that we focus on the specifications rather than trying to write the paper. I don't want to waste your time but I think we have to agree on the foundation.

Please give this some thought and we'll speak at 10:00.

Thanks.

Hilary

EXHIBIT

I

Thats great feedback. I did start a pre-post analysis, but changed direction...so that is easy enough to fold back in.

And, you don't have to "convince me" - I am here to serve. I just want to make sure that what I am doing analytically is reflecting your thinking. Lets use this document as a basis for the conversation and determine what needs to be added/changed.

Talk to you at 10. :)

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

From: "Hilary B. Miller" <hilary@millers.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, December 4, 2013 7:58:46 PM
Subject: RE: Checking In

Okay — I see.

This is a useful first step and considerably more detail about the components of credit scores than I was expecting.

So, this is really "Part 1," which is scores as the LHS variable and regulation on the right. "Part 2" is scores on the left and actual rollover behavior on the right.

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Please give this some thought and we'll speak at 10:00.

Thanks.

Hilary

EXHIBIT

J

-----Original Message-----

From: Jennifer Lewis Priestley
[mailto:jpriestl@kennesaw.edu]

Sent: Monday, December 09, 2013 12:37 PM

To: Hilary B. Miller

Subject: Re: Call [today](#) at 10? Does that work?

Hilary -

Question - I am "bucketing" the change in Vantage score to group those with an "adverse" outcome as we discussed. Would you rather see the bucketing logic based on percentiles (e.g., lowest 10%, lowest 20%, etc) or standard deviations (.5 std below the mean, 1 std below the mean, etc)?

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services

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department page: <http://math.kennesaw.edu/> center
page: <http://www.kennesaw.edu/csas/> what would dagny do?

EXHIBIT

K

----- Original Message -----

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Monday, December 9, 2013 12:41:55 PM
Subject: RE: Call [today](#) at 10? Does that work?

Doing this by percentage change makes the most sense to me. I can also see a rationale for bins for ranges of absolute changes in credit score (i.e., 25 points, 50 points, etc., which roughly corresponds to 5%, 10%, etc.).

-----Original Message-----

From: Jennifer Lewis Priestley
[<mailto:jpriestl@kennesaw.edu>]
Sent: Monday, December 09, 2013 12:37 PM
To: Hilary B. Miller
Subject: Re: Call [today](#) at 10? Does that work?

Hilary -

Question - I am "bucketing" the change in Vantage score to group those with an "adverse" outcome as we discussed. Would you rather see the bucketing logic based on percentiles (e.g., lowest 10%, lowest 20%, etc) or standard deviations (.5 std below the mean, 1 std below the mean, etc)?

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Associate Professor of Statistics
Director, Center for Statistics and Analytical Services

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department page: <http://math.kennesaw.edu/> center
page: <http://www.kennesaw.edu/csas/> what would dagny do?

EXHIBIT

L

> -----Original Message-----

> From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]

> Sent: Monday, December 09, 2013 8:15 PM

> To: Hilary B. Miller

> Subject: Latest Results

>

> Hi Hilary -

>

> I have attached two sets of results for you. The first set includes the Pre-Post for 2006-2007 and the second includes the Pre-Post results for 08-09. There are some interesting results.

>

> Here is a brief summarization of my observations:

>

> From the 2006-2007 file -

>

> 1. The VATNAGE score decreased about 6 points overall.

> 2. However, the change is very different by state - while all states experienced a decrease, CA experienced the greatest decrease (8.41 points) and TX experienced the least decrease (3.97 points).

> 3. I categorized the array of differences by BIN: <-100, -100 to -50, -49 to -25, -25 to 0 and then >0.

> Using this framework, MO has the smallest proportion of customers with a positive difference (BIN5) at 42%...TX has the largest proportion of customers with a positive difference (BIN5) at 46%.

> 4. While not a steadily linear pattern, the total rollovers and the percent of loans rolled over per customer per year increases from BIN1 to BIN5.

>

> From the 2008 - 2009 file -

>

> 1. The VANTAGE score changes very little (effectively 0) overall - but demonstrates greater variation by state.

> 2. UT had the largest pt drop (3.22) while KS had the largest improvement (3.44).

> 3. Using the same BIN structure as above, KS had the largest percent of customer in BIN5 (56.66%) and UT had the smallest (50.82).

> 4. As above, the total rollovers and the percent of loans rolled over per customer per year increases from BIN1 to BIN5.

>

> I don't have much availability on Tuesday, but I could be available on Wednesday for a call to catch up. Just let me know what works best for your schedule. :)

>

>

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>

>

> Jennifer Lewis Priestley, MBA, Ph.D.

> Associate Professor of Statistics

> Director, Center for Statistics and Analytical Services

>

> faculty page: <http://www.science.kennesaw.edu/~jpriestl/>

> department page: <http://math.kennesaw.edu/> center page: <http://www.kennesaw.edu/csas/> what would dagny do?

EXHIBIT

M

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]

Received: Monday December 9, 2013, 08:47 PM

To: Hilary B. Miller [hilary@miller.net]

Subject: Re: Latest Results

Ok. Let's catch up [Wednesday](#) when you get back. Just let me know a good time.

Sent from my iPhone

> On [Dec 9, 2013](#), at 8:29 PM, "Hilary B. Miller" <hilary@miller.net> wrote:

>

> I'll be traveling [Wednesday](#) morning -- back in the office around 10:30. I'm still digesting this. Seeing this information suggests to me, again, that we need to find a way to control for the subjects' pre-test Vantage score.

>

> -----Original Message-----

> From: Jennifer Lewis Priestley [mailto:jpriestl@kennesaw.edu]

> Sent: Monday, [December 09, 2013](#) 8:15 PM

> To: Hilary B. Miller

> Subject: Latest Results

>

> Hi Hilary -

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> Jennifer Lewis Priestley, MBA, Ph.D.

> Associate Professor of Statistics

> Director, Center for Statistics and Analytical Services

>

> faculty page: <http://www.science.kennesaw.edu/~jpriestl/>

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EXHIBIT

N

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, December 11, 2013 1:32:43 PM
Subject: RE: Analysis

Sure.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, December 11, 2013 12:57 PM
To: Hilary B. Miller
Subject: Analysis

Hilary -

I think I have an analytical solution to controlling for Pre-Borrowing Score - it involves Autoregressive Time Series Analysis. I am not an expert in this - but I have a colleague who is. I would like to have permission to have him help me with some of the math/programming for this technique. His name is Herman (Gene) Ray - he is an assistant professor of Statistics here at the University. I plan to pull a sample of the data and have him help me build the program to do the analysis... I will then "operationalize" the code to the larger dataset (he won't be accessing the full file). Let me know if this is ok with you.

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
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what would dagny do?

EXHIBIT

0

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]

Received: Wednesday January 22, 2014, 11:29 PM

To: Hilary B. Miller [hilary@miller.net]

Subject: Revised Results

Hi Hilary -

Sorry this is a bit late. I have incorporated all of my notes from our discussion on [Friday](#).

At this stage - my focus was to get the tables (analysis) completed - then focus on the writing...take a look and let me know what analytical edits are still needed.

Jennifer Lewis Priestley, MBA, Ph.D.

Associate Professor of Statistics

Director, Center for Statistics and Analytical Services

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what would dagny do?

EXHIBIT

P

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Saturday, January 25, 2014 5:40:34 PM
Subject: RE: Revised Results

Jennifer —

This looks as if it is as much, if not more, data than we can use. So we will certainly have our choices of which tables to use to tell the story. With the addition of the new tables, it appears that there are meaningful differences between states in patterns of usage. Perhaps paradoxically, those states with the “longest” usage are not the states with the worst outcomes, as antagonists of the industry posit. I suppose this finding is consistent with our previous observations that borrowers who are empowered to use credit as they need it == rather than being artificially constrained by regulation — do best. That’s a fine message.

I do have one question about the material presented around tables x.10 and x.11. The idea here should be to identify borrowers who (a) borrow for an excessively long time, and who (b) do not default. I’m not sure the (b) part is being captured here.

Otherwise, looks good. Thanks.

Hilary

EXHIBIT

Q

On Feb 3, 2014, at 2:25 PM, "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu> wrote:

Hi Hilary -

I just wanted to give you an update...I have made good progress
- I expect to have a completed draft to you before the end of the week (look for something around [Thursday](#)). :)

Jennifer Lewis Priestley, MBA, Ph.D.
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what would dagny do?

From: "Hilary B. Miller" <hilary@millier.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Thursday, [January 30, 2014](#) 11:11:17 AM
Subject: RE: Abstract - First Pass - Subject to Further Thought and Your Input

Abstract

The discourse surrounding payday loans has recently focused sharply on consumers' propensity to "roll over" these loans, which are typically two-week, very-high-cost advances. The industry's principal regulator has suggested that this sustained usage may be harmful to consumers. Exploiting interstate differences in rollover regulation, and using administrative data supplied by three lenders for 28,000 borrowers that have been matched to credit scores from a national credit reporting agency, I explore the effectiveness of various regulatory schemes in improving consumer outcomes in the years following initial payday borrowing. I also evaluate the effects of sustained payday-loan usage irrespective of regulatory scheme. I find that, while state regulation

has a small effect on longer-term usage patterns, consumers whose borrowing is unrestricted by regulation fare better than consumers in the most restrictive states, after controlling for initial financial status. I also find that longer-term borrowers (three months or more) have better outcomes than consumers whose borrowing is concluded in one month or less. These findings raise significant policy questions and suggest the appropriateness of further study of actual consumer outcomes before the imposition of new regulation at the federal level.

//.

-----Original Message-----

From: Hilary B. Miller [hilary@miller.net]

Received: Thursday January 30, 2014, 11:09 AM

To: Priestley, Jennifer Lewis [jpriestl@kennesaw.edu]

Subject: Abstract - First Pass - Subject to Further Thought and Your Input

Abstract

EXHIBIT

R

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Monday, February 3, 2014 5:23:34 PM
Subject: Re: Update

Jennifer, thanks for this progress report. Please take a little extra time and make sure you are going to be happy with both the form and substance of your report. The nature of your findings suggests that you will be subject to intense scrutiny from opponents of the industry. I want to make sure we have anticipated their criticisms.

On Feb 3, 2014, at 2:25 PM, "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu> wrote:

Hi Hilary -

I just wanted to give you an update...I have made good progress
- I expect to have a completed draft to you before the end of the week (look for something around [Thursday](#)). :)

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//.

-----Original Message-----

From: Hilary B. Miller [hilary@milller.net]
Received: Thursday January 30, 2014, 11:09 AM
To: Priestley, Jennifer Lewis [jpriestl@kennesaw.edu]
Subject: Abstract - First Pass - Subject to Further Thought and Your Input

Abstract

EXHIBIT

S

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Monday, February 17, 2014 7:44 PM
To: Hilary B. Miller
Subject: Full Draft

Hi Hilary -

Attached is my full draft of the paper. I anticipate a round or two of edits...but I think it generally makes a contribution to the current research on the topic. I will be around most of [tomorrow](#) if you want to get on the phone at any point. Jen

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
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what would dagny do?

EXHIBIT

T

On Feb 19, 2014, at 6:24 PM, "Hilary B. Miller" <hilary@miller.net> wrote:

Jen –

Again, sorry for the long feedback loop. I have had a couple of days from hell. Here are some comments on the paper:

1. On balance, the paper covers most of the key topics. The numbers seem to be plentiful. There are a few omissions, which I discuss below.

2. As a “30,000 foot” observation, the text seems light. I realize that the consumer-welfare aspects and the literature are relatively new to you, but the narrative seems somewhat superficial, without much discussion of what the underlying processes might be and how your findings dovetail with other literature. In the comments below, I will suggest some additional areas for development.

3. Punctuation and capitalization are somewhat random. You might want to have your maiden aunt who went to high school before 1960 read this.

4. The paper should start off with a discussion of payday loans, not with a discussion of Dodd-Frank or “abusive” practices. Actually, this material doesn’t seem to belong at all. What is a payday loan? Who uses them, how do they use them, and why is this population potentially vulnerable? Why do rollovers matter? What is the potential harm from rollovers? What previously unanswered questions does your paper answer, and why are your questions important to policymakers? You need to set the paper up better. I get to the third paragraph before you even start this discussion. It needs to start with a bang. It now starts with kind of a thud. This is blockbuster stuff. You put me to sleep before I got to the “good stuff.”

5. The paper needs a more comprehensive discussion of the consumer-welfare impacts of payday borrowing. This really means you need to flesh out your lit survey a bit. I would consider adding Morgan and Strain (2007); Adair Morse (2009); and Stoianovici and Maloney (2008), all to be inserted at around the existing discussion of Zinman (2010). It serves your purposes to suggest that the answers to the ultimate welfare questions are murky. These papers tend to counterbalance the CFPB’s white paper.

6. The quoted material from Desai and Elliehausen (2013) doesn’t need to be set forth as a quotation. Instead, here simply set forth the propositions they refer to and you can include the citation as a reference. We’ll give you some other citations for the same material. The quoted matter is old hat and the industry’s longstanding position, not original with Desai.

7. The literature survey needs to be more comprehensive with respect to the evidence on rollovers. You need to discuss Fusaro and Cirillo (2011) and Mann (2013).

8. Critically, although you cite Bhutta, Skiba and Tobacman (2013), for several possible adverse demographic findings, you do not cite the paper for its principal finding, which is that *payday loans have a “precise zero” long-run effect on consumers’ financial well-being*. This paper is

and remains the “gold standard” for whether payday loans are harmful or helpful to consumers. The results found by these investigators fully take into account all of the sustained usage of payday loans criticized by the CFPB. The CFPB simply chooses to ignore it. There is no other academic research that relates sustained usage with consumer outcomes, and there is no economically demonstrated “need” to protect consumers either from multiple loans or longer usage terms. The Mann paper effectively destroys the notion that consumers are being misled, as alleged by Pew, into taking out a short-term product for long-term use. These relationships need to be developed in the text.

9. On page 3, I don’t think you have defined the dataset properly. The borrower histories relate to borrowers who incurred “new” loans in the first six months of 2006 and the first six months of 2008. In this regard, “new” means no loans in the 90 days prior to the first loan in the dataset (not necessarily “virgin”). My understanding was that borrowers from 2006 were followed in 2007 but not necessarily in any subsequent period, etc. Can you check this?

10. I would like you to add at least one or two extra paragraphs on the VantageScore in general. You should cover what the score is, what its principal components are, and how it works. This can be a relatively brief discussion, although it is an opportunity to introduce the weights applied to the components, which are relevant to our population. Then, you should explain – and this is really critical – why VantageScore is an appropriate outcome variable for this kind of study. You can borrow from Bhutta et al. if you need to do so here, but the key is to give a clear indication of the wisdom of selecting this outcome variable in preference to others than you might have chosen (such as, for example, simply using defaults in the style of Desai). You should anticipate and counter the argument made by Pew that these scores are either too uniformly low or irrelevant for this population.

11. Where you refer on pp. 3-4 to Kaufman, you should relocate these discussions back to the “literature survey” part of the paper, and leave this part to discuss your own findings.

12. In general, I find the tables are not self-explanatory. By that I mean that a reasonably skilled reader cannot turn to a table and immediately tell what is being represented, either because the column and row headings are omitted, too abbreviated, or too cryptic. This should be remedied, including by the addition of footnotes where necessary. Go overboard on explaining in the footnotes how to read the tables, giving express examples if necessary. A key audience for the paper will be highly educated but innumerate policymakers.

13. The material starting on page 4 is where some key “beefing up” of the text is required. Here, you need to explain not only what the tables say, but also what they mean. As a policymaker, what am I supposed to take away from this?

14. Your rollover “definition” isn’t a universal definition, it’s just one you assumed for purposes of this paper. Others have made different assumptions. See Mann’s paper (using 14-day debt-free period to determine whether loan rolled over or not). You need to explain why you chose 2 days instead of some other period, why that’s an appropriate choice, and how your results might have varied if you had made a Mann-like choice, for example.

15. In general, you should refer to payday borrowers as “borrowers” rather than “customers.” Globally.

16. You have a tendency to launch right into the numbers (see, e.g., the first full paragraph after the Section 3.2 header), rather than state what you sought to study, why it matters, how to interpret the results, and what the implication is for policymakers. Put yourself in the shoes of the reader and take a more gradual start, then dump the number, and finally explain what they mean.

17. The astounding relationship between sustained use and outcome should be more fully developed. Why does this relationship exist? What theories from economics should have put us on notice of this result? Why is the market a better judge of who should obtain credit than a state legislature????

17. I think the “default” discussion is somewhat confusing. Going back to the original purpose of this inquiry, opponents of payday lending hypothesize that defaults are harmful for consumers, although there seems to no data to support that hypothesis. We want to test this hypothesis and report the results of our testing. (At least one possible counterfactual is that defaults are actually welfare-enhancing because the borrower gets to keep the loan principal and collection efforts are largely ineffective. This may explain what is going on.) In any event, we once again launch directly into the numbers without explaining why we are making this inquiry and why anyone should care about it. We then don’t connect the results to the original question.

18. The second part of the “default” discussion is equally lost here, which is whether it is possible to identify *ex ante* the loan applicants who will have adverse outcomes from borrowing, and simply deny them credit through scoring or otherwise. For purpose of this discussion, an “adverse” outcome is one that harms the borrower, not the lender. This is part of a popular new theory of consumer protection that involves having the lender make sure that the loans are “safe” or “suitable” or “affordable” for the consumer, which is a different inquiry from whether the consumer is “creditworthy.” We wanted to test our ability to identify and segregate these consumers. The discussion is lost, and I fear that the data aren’t adequately explained.

19. In the conclusion, the “\$64 question” is the rollover one. But we misstate (or don’t reach) the consumer-harm question related to suitability.

20. What happened to the general estimating equation?

21. I am out of time and I want to give you some feedback on a few of the tables. I will try to do that later tonight, tomorrow Friday.

As you say, you have some blockbuster material. The paper needs to be a bit more literary and to “sing.” I think this can be accomplished primarily by slowing down and taking the reader ponderously through each analysis, explanation and, importantly, meaning. It is going to be extremely good when done.

I’ll be on my cell tomorrow most of the day if you want to chat, and I have email access.

Thank you!

Hilary

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]

Sent: Monday, February 17, 2014 7:44 PM

To: Hilary B. Miller

Subject: Full Draft

Hi Hilary -

Attached is my full draft of the paper. I anticipate a round or two of edits...but I think it generally makes a contribution to the current research on the topic. I will be around most of tomorrow if you want to get on the phone at any point. Jen

Jennifer Lewis Priestley, MBA, Ph.D.

Associate Professor of Statistics

Director, Center for Statistics and Analytical Services

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what would dagny do?

EXHIBIT

U

On Mar 4, 2014, at 6:52 PM, "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu> wrote:

Hi Hilary -

I have reworked the paper - I think it is improved. Looking forward to your feedback.

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
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what would dagny do?

<RESULTS NARRATIVE FULL DRAFTV3.docx>

EXHIBIT

V

On Mar 9, 2014, at 11:50 AM, "Hilary B. Miller" <hilary@miller.net> wrote:

Jen –

Thanks so much for this. I agree, it is greatly improved. I have some further comments for you, and I think I can take it from there after you accommodate these issues:

1. Another 30,000' observation, and this one about organization. From a structural standpoint, there is something amiss here, and I realize that it's a monster of my own creation. The paper is supposed to be about payday rollovers. It has that title, and that is its indeed its thrust. But then it suddenly lurches into this "default" discussion, which is a non sequitur, largely unrelated, and a separate issue altogether. And it certainly confuses the main issue. So let's break all that stuff out and make it a SEPARATE PAPER. And it's close and doesn't need a lot of additional work. We can discuss that later. In the meanwhile, we can devote our resources to prompt completion of a rollover-only paper.

2. You will hear a fairly consistent theme in many of the next several comments, which is that they reiterate comments given to you in the 2/19 memo which have not been reflected in this draft. To begin, the "Background" section of the paper, which includes your lit survey, still needs some work. Please go back and look at my previous memo of 2/19 regarding Fusaro and Cirillo (2011) and Mann (2013). These are the canonical works on rollovers, but you don't even bother mentioning them in this section. The later references in the paper should be deleted. You should specifically discuss not only that they studied these matters, but what and how they studied, and what they concluded. Please look at my previous comments. At multiple points in the paper it feels as if you are citing Einstein for his cake recipe instead of for his general theory of relativity.

3. Likewise, you need to pick up my comments about Bhutta (2013) from my 2/19 memo. You have quoted from the paper on p. 3, but this quote completely misses the principal finding of the paper. Take another look at my memo.

4. In general, this section of the paper enumerates the papers, but doesn't explain them well. For example, you say very little about Kaufman. This is an extremely important paper and it is, together with Bhutta, the work on which your paper naturally builds. You therefore need to explain both papers, and then explain the role of your paper plays in adding to science.

5. In general, we do not accept the notion that a "cycle of debt" even exists, and I would appreciate it if you would delete all references to this term, unless you are rebutting its existence. As a threshold matter, and you and I have discussed, the term "cycle of debt" is itself problematic. In common parlance, we do not use this term to refer to a credit card "revolver" who repays his balance over the longest possible time period, nor do we apply it to a mortgage borrower who gets a 10-year interest-only loan (which banks happily provide). It is a term that is nearly exclusively reserved for payday borrowers, so it must import something more than merely a borrower who remains indebted for "too long." The "something more" is a feature of payday loans that is asserted by our antagonists to exist, but which does not, in fact, exist: a "debt trap." The theory of this "trap" seems to be that borrowers devote so much of their free cash flow to paying interest on their payday loans that they cannot repay principal. Thus, according to the

“trap” theory, borrowers are compelled to borrow ever-increasing amounts just to cover the interest, with no hope of repaying principal. The problem with this theory of a “trap” is that there is no non-anecdotal evidence to support its existence, and the numbers used by CRL to illustrate it are cooked – false, logically inconsistent, deliberately misleading.

See <http://ssrn.com/abstract=2029146> at page 9 (pages are unnumbered). And the science, as I have previously discussed with you, completely negates the concept of an interest-caused “trap.” See <http://ssrn.com/abstract=1960776>. Because of the lack of science, and the lack of any principled application of the term “cycle” to this kind of usage, we begin simply by denying the existence of a “cycle of debt” and, perhaps more importantly, by denying that extended use is *per se* harmful. As I frequently state publicly, the term “cycle of debt” is a political epithet (usually combined with terms like “trap,” “triple-digit” and “predatory”) which is both loaded and implies some kind of contrary norm. It is not a term of science, and the term is not accepted in peer-reviewed economics literature. I think even you fall into this fallacy in the paper (for example, it is impossible to compound interest on a payday loan, but you seem to imply otherwise in the paper). Perhaps you could rethink this and work some of the Stoesz material into your paper instead. Let’s just call this section “Background on Rollovers.”

6. The lit survey also needs a broader discussion of the CFPB “White Paper,” to which you allude but which you summarize only for its non-data-based findings. I can fix this in your next draft, but it would be easier for you to do it yourself. Again, state what they studied, how they studied it, and what the conclusions were that were supported by their data. You can then discuss separately the political conclusions included in the White Paper that were not supported by the data. I can help you with this if you want.

7. A new point: each of the states you studied in your work has a different regulatory scheme, and rollovers aren’t the only issue that is regulated differently between states. You don’t, for example, control for the differences in interest rates permitted in California (459% APR), Florida (260% APR) and Texas (unlimited). I think you need to explain how controlling for “state” rather than individual regulatory features is a good proxy for “rollovers.” The consumer market experience of interest rates, in practice, is that they are immaterially different.

8. The tables are still not self-explanatory. A non-professional reader should be able to look at any table and tell exactly what is being represented. This can be accomplished through footnotes or more detailed headers. We do not want people’s eyes to glaze over when they look at these tables or to be required to refer back to the text to see what is happening. See comment #12 in the 2/29 memo.

9. Please go back and re-read my comment #14 about the “two day” choice from the 2/29 memo. I don’t think you have addressed this election you made, which you made differently from, for example, Mann. Fusaro and Cirillo show outcomes under alternative definitions of what constitutes a “rollover.” You show one. You need to explain.

10. What happened to the tables from Sandler’s paper that I had asked you to include? They now seem to be missing. The “days to clearance” issue is important to be able to refer to prior art.

11. In your discussion of databases (FL and OK), you state that the rollover rates are low, which they must necessarily be. You then drop the discussion. There's a "But ..." (look at UT) and a greatly expanded further discussion warranted here. While the numbers are important, the reader needs to know what's going on here. The presumption is that databases greatly enhance consumer welfare. Surprise! They don't. Why?

I have sent you an APA template that you can apply to the paper.

Thanks for all your hard work. It is really coming along. I am hoping that I can start line-editing your next draft soon and that we can finish the paper this month.

Hilary

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Tuesday, March 04, 2014 10:53 PM
To: Hilary B. Miller
Subject: Next Round...

Hi Hilary -

I have reworked the paper - I think it is improved. Looking forward to your feedback.

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

EXHIBIT

W

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]

Received: Saturday March 22, 2014, 01:36 PM

To: Hilary B. Miller [hilary@miller.net]

Subject: Checking In

Hi Hilary -

I trust you are well. I wanted to check in to ensure that you received the updated draft of the paper on **Monday** and to see if you wanted to catch up at any point. Jen :)

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
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department page: <http://math.kennesaw.edu/>
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what would dagny do?

EXHIBIT

X

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Saturday, March 22, 2014 9:38:03 AM
Subject: RE: Checking In

Got it. I am focusing now primarily on editorial efforts. I may have some questions for you. I am traveling and have not been able to block out enough time to do this, so it will await my return on [Tuesday](#). Also, the CFPB is holding a public hearing on payday late next week, and I am looking to see if they have any new data to report. I'll be back to you with suggested edits. Thanks.

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]
Received: Saturday March 22, 2014, 01:36 PM
To: Hilary B. Miller [hilary@milller.net]
Subject: Checking In

Hi Hilary -

I trust you are well. I wanted to check in to ensure that you received the updated draft of the paper on [Monday](#) and to see if you wanted to catch up at any point. Jen :)

Jennifer Lewis Priestley, MBA, Ph.D.
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what would dagny do?

EXHIBIT

Y

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Tuesday, March 25, 2014 7:23:17 AM
Subject: RE: CFPB Finds Four Out Of Five Payday Loans Are Rolled Over Or Renewed

Sorry — my full message got deleted.

The CFPB is releasing this new paper — very noisily — [today](#). We need to update your paper to refer to and dispense with it. Essentially, it is new lipstick on the same old pig: repeat usage without evidence of actual consumer detriment. In any event, it is sufficiently important that we need to say something about it. Would you please read it and write a couple of paragraphs? I'll find the appropriate place to slot it in.

I'm going to begin editing in earnest in the next day or so. Back now from London and focusing on this stuff.

Thanks.

Regards,

Hilary

This message, together with any attachments, is intended only for the use of the individual or entity to which it is addressed and may contain information that is legally privileged, confidential and exempt from disclosure. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this message, or any attachment, is strictly prohibited. If you have received this message in error, please notify the original sender immediately by telephone ([203-399-1320](tel:203-399-1320)) or by return e-mail and delete the message, along with any attachments, from your computer. IRS Circular 230 disclosure: Any tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any matters addressed herein. Thank you.

-----Original Message-----

From: Jennifer Lewis Priestley [jpriestl@kennesaw.edu]
Received: Tuesday March 25, 2014, 07:15 AM

To: Hilary B. Miller [hilary@miller.net]

Subject: Re: CFPB Finds Four Out Of Five Payday Loans Are Rolled Over Or Renewed

Would you like to catch up this afternoon?

Sent from my iPhone

On [Mar 25, 2014](#), at 7:13 AM, "Hilary B. Miller" <hilary@miller.net> wrote:

Jen —

-----Original Message-----

From: CFPB_Communications [CFPB_Communications@cfpb.gov]

Received: Tuesday [March 25, 2014](#), 12:08 AM

To: CFPB_Communications [CFPB_Communications@cfpb.gov]

Subject: CFPB Finds Four Out Of Five Payday Loans Are Rolled Over Or Renewed

<image001.jpg>

FOR IMMEDIATE RELEASE:

[March 25, 2014](#)

CONTACT:

Office of Communications

Tel: ([202](tel:2024357170)) [435-7170](tel:2024357170)

**CONSUMER FINANCIAL PROTECTION BUREAU FINDS FOUR OUT OF FIVE PAYDAY LOANS ARE ROLLED
OVER OR RENEWED**

*Research Shows the Majority of Payday Loans Are Made to Borrowers Caught in a Revolving Door of
Debt*

WASHINGTON, D.C. — [Today](#) the Consumer Financial Protection Bureau (CFPB) issued a report on payday lending finding that four out of five payday loans are rolled over or renewed within 14 days. The study also shows that the majority of all payday loans are made to borrowers who renew their loans so many times that they end up paying more in fees than the amount of money they originally borrowed.

“We are concerned that too many borrowers slide into the debt traps that payday loans can become,” said CFPB Director Richard Cordray. “As we work to bring needed reforms to the payday market, we want to ensure consumers have access to small-dollar loans that help them get ahead, not push them farther behind.”

The report is at: http://files.consumerfinance.gov/f/201403_cfpb_report_payday-lending.pdf

Payday loans are typically described as a way to bridge a cash flow shortage between paychecks or other income. Also known as “cash advances” or “check loans,” they are usually expensive, small-dollar loans, of generally \$500 or less. They can offer quick and easy accessibility, especially for consumers who may not qualify for other credit.

Today’s report is based on data from a 12-month period with more than 12 million storefront payday loans. It is a continuation of the work in last year’s CFPB report on Payday Loans and Deposit Advance Products, one of the most comprehensive studies ever undertaken on the market. That report raised questions about the loose lending standards, high costs, and risky loan structures that may contribute to the sustained use of these products.

Today’s report provides a deeper analysis of the data, focusing on repeated borrowing by consumers after they take out an initial payday loan. A primary driver of the cost of payday loans is that consumers may roll over the loans or engage in re-borrowing within a short window of time after repaying their first loan. Today’s study looks at not only the initial loans but also loans taken out within 14 days of paying off the old loans; it considers these subsequent loans to be renewals and part of the same “loan sequence.” Today’s study is the most in-depth analysis of this pattern to date.

Key Findings: Many Payday Loans Become Revolving Doors of Debt

By focusing on payday loan renewals, the study found that a large share of consumers end up in cycles of repeated borrowing and incur significant costs over time. Specifically, the study found:

- **Four out of five payday loans are rolled over or renewed:** More than 80 percent of payday loans are rolled over or renewed within two weeks. The study found that when looking at 14-day windows in the states that have cooling-off periods that reduce the level of same-day renewals, the renewal rates are nearly identical to states without these limitations.
- **Three out of five payday loans are made to borrowers whose fee expenses exceed amount borrowed:** Over 60 percent of loans are made to borrowers in the course of loan sequences lasting seven or more loans in a row. Roughly half of all loans are made to borrowers in the course of loan sequences lasting ten or more loans in a row.
- **One out of five new payday loans end up costing the borrower more than the amount borrowed:** For 48 percent of all initial payday loans – those that are not taken out within 14 days of a prior loan – borrowers are able to repay the loan with no more than one renewal. But for 22 percent of new loans, borrowers end up renewing their loans six times or more. With a typical payday fee of 15 percent, consumers who take out an initial loan and six renewals will have paid more in fees than the original loan amount.

- **Four out of five payday borrowers either default or renew a payday loan over the course of a year:** Only 15 percent of borrowers repay all of their payday debts when due without re-borrowing within 14 days; 20 percent default on a loan at some point; and 64 percent renew at least one loan one or more times. Defaulting on a payday loan may cause the consumer to incur bank fees. Renewing loans repeatedly can put consumers on a slippery slope toward a debt trap where they cannot get ahead of the money they owe.
- **Four out of five payday borrowers who renew end up borrowing the same amount or more:** Specifically, more than 80 percent of borrowers who rolled over loans owed as much or more on the last loan in a loan sequence than the amount they borrowed initially. These consumers are having trouble getting ahead of the debt. The study also found that as the number of rollovers increases, so too does the percentage of borrowers who increase their borrowing.
- **One out of five payday borrowers on monthly benefits trapped in debt:** The study also looked at payday borrowers who are paid on a monthly basis and found one out of five remained in debt the entire year of the CFPB study. Payday borrowers who fall into this category include elderly Americans or disability recipients receiving Supplemental Security Income and Social Security Disability.

Today's report will help educate regulators and the public about how the payday lending market works and about the behavior of borrowers in the market. The CFPB has authority to oversee the payday loan market. It began its supervision of payday lenders in [January 2012](#). In [November 2013](#), the CFPB began accepting complaints from borrowers encountering problems with payday loans.

###

The Consumer Financial Protection Bureau is a 21st century agency that helps consumer finance markets work by making rules more effective, by consistently and fairly enforcing those rules, and by empowering consumers to take more control over their economic lives. For more information, visit consumerfinance.gov.

EXHIBIT

Z

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, March 26, 2014 9:25 AM
To: Hilary B. Miller
Subject: Data Point Response

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
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what would dagny do?

EXHIBIT

AA

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, March 26, 2014 10:02:41 AM
Subject: RE: Data Point Response

Thanks for this. It's more prolix than what I think is appropriate, but I'll skinny it down and insert it in the paper.

Recall that both Mann and Fusaro & Cirillo use a "window" much wider than yours to define a "rollover." In doing so, they are capturing an economic, rather than literal, refinancing. The theory is that, if the consumer needs to re-incur the debt before reaching his or her next payday, the consumer lacked the means to repay the debt in full from recurring cash inflows. This is something of an effort to bend over backwards to accommodate our antagonists but nevertheless captures an issue that is important to policymakers.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, March 26, 2014 9:25 AM
To: Hilary B. Miller
Subject: Data Point Response

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what would dagny do?

EXHIBIT

BB

On [Apr 1, 2014](#), at 4:56 PM, "Hilary B. Miller" <hilary@miller.net> wrote:

Jen –

I have completed a preliminary round of editing your paper. I have spent quite a bit of time on it and have been as careful as possible. The principal changes I have made are organizational and editorial, while attempting to the greatest extent possible to leave your original substance intact. I think the paper is now more concise and less verbose, better organized and a bit more linear in how it reaches its conclusions. I have beefed up some portions of the paper with additional sources and explanations, while deleting a fair amount of the dated literature discussion.

The changes are numerous and fairly extensive. This draft is not redlined. Please review it and feel free to make any further additional changes (or reversions) you feel strongly about.

There are a couple of tasks left for you:

1. The references need to be double-checked against the text. Some of the articles (e.g., Bhutta) have been revised and republished in later-year editions. When possible, refer to the latest edition, which will usually be at SSRN rather than elsewhere. I will do this again myself, too. Please.
2. Table 1 provides a somewhat jumbled version of how rollover limitations work. (This paper is supposed to be about rollover limitations, BTW, not general payday-loan limitations; I have changed several references in the text on this.) Two things here: (a) California has a state law that prohibits rollovers but allows unlimited same-day transactions as long as they aren't interest-only payments. In other words, a borrower can repay his loan and immediately re-borrow, and do so an unlimited number of times in succession. I don't think your description in the text of California as a "strict" rollover state is correct with this in mind. (b) Utah is not an unregulated-rollover state, as your text indicated – see the new fn. 7, which I have added in the attachment. I think Table 1 would be more useful if it were modified to give more emphasis to interstate rollover-regulation variation and to downplay (or omit altogether) minimum and maximum loan terms, which are not "binding" in the economic sense and really do not operate as interstate differences.
3. I have highlighted in yellow a number of suggested areas for minor additional text.
4. Another item – and this is really big – is that you will need to test your results for robustness under a different definition of "rollover" that comports with the new CFPB paper (CFPB 2014) – i.e., 14 rather than 2 days. I leave to you just how much you need to do to persuade yourself that the results don't really change. Once you are satisfied, you can update the footnote to state what procedures you followed and why you are persuaded.

This is a terrific paper. When it is done, you are going to be famous and your phone will ring off the hook. We are actually talking about a "quiet" release to a few peer reviewers and including the CFPB in the review group. We want them to believe that the results are honest, verifiable

and, most importantly, correct. Thanks so much for your help. Please try to finish this up quickly so that we can get it in peer review circulation.

Regards,

Hilary

<Priestley Payday v5.docx>

EXHIBIT

CC

From: Hilary B. Miller
Sent: Wednesday, April 02, 2014 7:46 AM
To: Jennifer Lewis Priestley
Subject: Re: Rollover Paper

Sorry, two more things:

1. I have decided that the abstract is too long. I am going to shrink it, mostly by shortening the introductory sentences. Let me mess with it, please.
2. In line with the discussion below of California being a fairly liberal (rather than strict) rollover state in economic reality, you may need to adjust the text, where you hold California out as an example of bad outcomes.
3. In Table 1, and possibly elsewhere, you will need to discuss that the applicable regulatory environment in Texas during the study period permitted operators to lend statewide under the so-called "credit services organization" or "CSO" model, which, despite the existence of other regulations that limit rates and fees in Texas, permitted unregulated rates and rollovers.

HM

From: Jennifer Priestley <jpriestl@kennesaw.edu>
Date: Tuesday, April 1, 2014 at 7:49 PM
To: Hilary Miller <hilary@miller.net>
Subject: Re: Rollover Paper

Thanks Hilary. I will get on this tomorrow. :)

Sent from my iPhone

On Apr 1, 2014, at 4:56 PM, "Hilary B. Miller" <hilary@miller.net> wrote:

Jen –

I have completed a preliminary round of editing your paper. I have spent quite a bit of time on it and have been as careful as possible. The principal changes I have made are organizational and editorial, while attempting to the greatest extent possible to leave your original substance intact. I think the paper is now more concise and less verbose, better organized and a bit more linear in how it reaches its conclusions. I have beefed up some portions of the paper with additional sources and explanations, while deleting a fair amount of the dated literature discussion.

The changes are numerous and fairly extensive. This draft is not redlined. Please review it and feel free to make any further additional changes (or reversions) you feel strongly about.

There are a couple of tasks left for you:

1. The references need to be double-checked against the text. Some of the articles (e.g., Bhutta) have been revised and republished in later-year editions. When possible, refer to the latest edition, which will usually be at SSRN rather than elsewhere. I will do this again myself, too. Please.

2. Table 1 provides a somewhat jumbled version of how rollover limitations work. (This paper is supposed to be about rollover limitations, BTW, not general payday-loan limitations; I have changed several references in the text on this.) Two things here: (a) California has a state law that prohibits rollovers but allows unlimited same-day transactions as long as they aren't interest-only payments. In other words, a borrower can repay his loan and immediately re-borrow, and do so an unlimited number of times in succession. I don't think your description in the text of California as a "strict" rollover state is correct with this in mind. (b) Utah is not an unregulated-rollover state, as your text indicated – see the new fn. 7, which I have added in the attachment. I think Table 1 would be more useful if it were modified to give more emphasis to interstate rollover-regulation variation and to downplay (or omit altogether) minimum and maximum loan terms, which are not "binding" in the economic sense and really do not operate as interstate differences.

3. I have highlighted in yellow a number of suggested areas for minor additional text.

4. Another item – and this is really big – is that you will need to test your results for robustness under a different definition of "rollover" that comports with the new CFPB paper (CFPB 2014) – i.e., 14 rather than 2 days. I leave to you just how much you need to do to persuade yourself that the results don't really change. Once you are satisfied, you can update the footnote to state what procedures you followed and why you are persuaded.

This is a terrific paper. When it is done, you are going to be famous and your phone will ring off the hook. We are actually talking about a "quiet" release to a few peer reviewers and including the CFPB in the review group. We want them to believe that the results are honest, verifiable and, most importantly, correct. Thanks so much for your help. Please try to finish this up quickly so that we can get it in peer review circulation.

Regards,

Hilary

<Priestley Payday v5.docx>

EXHIBIT

DD

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Friday, April 4, 2014 1:34:21 PM
Subject: RE: Rollover Paper

I don't actually see that table in the "legacy" materials. A more useful table would be Table 8 from the "legacy" materials, but restated on the basis of your definition of "rollover" (i.e., 2 days rather than same day).

I have made some changes to the paper (only major substantive change is material related to the CSO model and CFSA "best practices." Here's the revised draft. Please incorporate a correct table instead of Table 3.

Thanks.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Friday, April 04, 2014 1:27 PM
To: Hilary B. Miller
Subject: Re: Rollover Paper

Hi Hilary - that was one of the "legacy" tables that I did not create (one of two in the paper - the other is Table 4) - I created the proportion of rollovers column - which I can recreate. For the total number of loans, I have closer to 852,000. Would you like for me to update it?

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Friday, April 4, 2014 1:14:38 PM
Subject: Rollover Paper

Jen –

I'm looking at Table 3. How could 38,000 borrowers have 7,253,000 loans?

Hilary

EXHIBIT

EE

On [Apr 5, 2014](#), at 10:12 AM, "Hilary B. Miller" <hilary@miller.net> wrote:

I tend to mull, re-read, and fidget a lot. Here are a couple more questions for you:

1. We have retained the language in the body (now deleted from the abstract) that "...longer-term borrowers have better outcomes than consumers whose borrowing is restricted by law to 30 days or less" On reflection, I'm not sure where the "30 days" came from originally, since there is no state with a 30-day limitation. Let's delete that here, okay? Is there some better or more accurately descriptive way we can explain this? I like the generality, so I'm not pressing for more detail.
2. This raises a somewhat larger question, which is how we chose to classify states as "permissive" or "restrictive," and some states are arguably ambiguous in terms of how they should be classified. Maybe a paragraph on this topic is warranted. Happy to draft if you agree.
3. I think the "36 day" number from Mann is the median ex ante estimate, not the mean. Do you concur?
4. I see that you added additional language about how VantageScores treat mortgages, but I'm not sure that this added language is relevant to this market (which you seem to point out in the parenthetical).
5. I'm going to draft a footnote regarding the metric you created, which is percentage of loans rolled over. I think this needs explanation and it seems like a very simple and powerful tool.
6. I'm not sure we ever explain how we got from a total sample of 37K borrowers to subsets of 29K. What should we say about that?

Will await your response and incorporate these matters in a redlined revised draft later [today](#) or [tomorrow](#).

Hilary

EXHIBIT

FF

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Monday, April 7, 2014 10:46:06 AM
Subject: RE: A couple more questions ...

Here is a revised draft (both redlined and clean versions). Please advise any additional comments.

HM

From: Hilary B. Miller
Sent: Saturday, April 05, 2014 10:39 PM
To: Jennifer Lewis Priestley
Subject: Re: A couple more questions ...

This is great. I'll get you another draft [tomorrow](#). Thank you!

From: Jennifer Priestley <jpriestl@kennesaw.edu>
Reply-To: Jennifer Priestley <jpriestl@kennesaw.edu>
Date: Saturday, April 5, 2014 at 8:46 PM
To: Hilary Miller <hilary@miller.net>
Subject: Re: A couple more questions ...

Hi Hilary -

I provided my thoughts on your points below. If you want me to append them to the doc, just let me know:

1. We have retained the language in the body (now deleted from the abstract) that "...longer-term borrowers have better outcomes than consumers whose borrowing is restricted by law to 30 days or less" On reflection, I'm not sure where the "30 days" came from originally, since there is no state with a 30-day limitation. Let's delete that here, okay? Is there some better or more accurately descriptive way we can explain this? I like the generality, so I'm not pressing for more detail.

FROM JLP: I agree. I believe this was left over from an earlier iteration. Since we restricted a rollover to ≤ 2 days, this came in "under the radar" for all states, but I don't think we need to get into that discussion here.

2. This raises a somewhat larger question, which is how we chose to classify states as "permissive" or "restrictive," and some states are arguably ambiguous in terms of how they should be classified. Maybe a paragraph on this topic is warranted. Happy to draft if you agree.

FROM JLP: Conceptually I agree with you - but we never actually put the states into distinct categories. We only make reference to Texas as the least restrictive (I suppose that would be a category of 1). And then more generally make references to "states with strict rollover restrictions" (Florida, Kansas, Oklahoma). Or states with database requirements (Florida and Oklahoma). I actually like the looser comparisons, because it allows us more flexibility in our discussions - like with California - without boxing ourselves in a corner and then having to defend why we are countering our own position.

3. I think the "36 day" number from Mann is the median ex ante estimate, not the mean. Do you concur?

JLP: Its hard to say. Looking at Figure 3 in his paper, the distribution is heavily skewed with values out to 250+. A mean calculation is very sensitive to outliers - where a median is not. I would expect that you are correct - the value of 36 appears to be a median rather than a mean - which I would

expect would be much higher. But, ultimately without the actual data or the descriptive stats, we cant know for certain.

4. I see that you added additional language about how VantageScores treat mortgages, but I'm not sure that this added language is relevant to this market (which you seem to point out in the parenthetical).

JLP: I added the verbiage because it was identified as a regularly referenced difference between the two scores. Ultimately, I would expect that relatively few people in this segment would have a mortgage. So, while I don't think this point is directly relevant to the paper, it generally explains a frequently cited distinction.

5. I'm going to draft a footnote regarding the metric you created, which is percentage of loans rolled over. I think this needs explanation and it seems like a very simple and powerful tool.

JLP: Yep. Given that we needed this value for each borrower in the dataset, this was the only way I knew to do it. So, again, I took the total number of loans (INPUT_SEQNUM) for each customer (KEYFLAG). This was the denominator. Then, I determined how many of those loans were "rollovers" defined as ≤ 2 days between the date paid for the previous loan and the date opened for the next loan. The number of loans that met this definition became the total number of rollovers for each customer. The ratio of the two values was the percent of loans rolled over by customer.

6. I'm not sure we ever explain how we got from a total sample of 37K borrowers to subsets of 29K. What should we say about that?

JLP: All analytical software works on a "complete case basis" for multivariate analysis (BTW - I used BASE SAS v9.3 if that is needed). So, what this means is that we could have 37,000 borrowers, but only 29,000 had populated values for each variable required for analysis. If 10 variables are included in something like the GEE, and an obs only has 9 of the variables populated, the entire obs gets dropped because it is not a "complete case". In the end, the borrowers that dropped out were not statistically different (looking at credit score) from the ones that were retained for modeling. I could have imputed missing values - but given the overall number of obs, I did not think it was necessary.

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Priestley" <jpriestl@kennesaw.edu>

Sent: Saturday, [April 5, 2014](#) 10:11:58 AM

Subject: A couple more questions ...

I tend to mull, re-read, and fidget a lot. Here are a couple more questions for you:

1. We have retained the language in the body (now deleted from the abstract) that "...longer-term borrowers have better outcomes than consumers whose borrowing is restricted by law to 30 days or less" On reflection, I'm not sure where the "30 days" came from originally, since there is no state with a 30-day limitation. Let's delete that here, okay? Is there some better or more accurately descriptive way we can explain this? I like the generality, so I'm not pressing for more detail.
2. This raises a somewhat larger question, which is how we chose to classify states as "permissive" or "restrictive," and some states are arguably ambiguous in terms of how they should be classified. Maybe a paragraph on this topic is warranted. Happy to draft if you agree.
3. I think the "36 day" number from Mann is the median ex ante estimate, not the mean. Do you concur?
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5. I'm going to draft a footnote regarding the metric you created, which is percentage of loans rolled over. I think this needs explanation and it seems like a very simple and powerful tool.
6. I'm not sure we ever explain how we got from a total sample of 37K borrowers to subsets of 29K. What should we say about that?

Will await your response and incorporate these matters in a redlined revised draft later [today](#) or [tomorrow](#).

Hilary

EXHIBIT

GG

----- Original Message -----

From: "Hilary B. Miller" <hilary@milller.net>

To: "Jennifer Lewis Priestley Ph. D." <jpriestl@kennesaw.edu>

Sent: Thursday, April 10, 2014 9:35:01 AM

Subject: Paper

Jen --

I have sent your paper to a few reviewers in confidence -
- Ronald Mann, Victor Stango and Gregory Elliehausen. I
just received Mann's comments and will pass them along to
you in a separate email.

H

Hilary B. Miller
500 West Putnam Avenue - Suite 400
Greenwich, Connecticut 06830-6096
(203) 399-1320 (voice)
(203) 517-6859 (cell)
(914) 206-3727 (fax)
(sent from iPad)

EXHIBIT

HH

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Monday, December 30, 2013 10:57:34 AM
Subject: RE: Checking In

8:30 is fine.

I agree on getting the numbers right and am not in a great rush to start writing. When we do, it will be fine to paraphrase liberally from Sandler's paper and to use some of her additional work that's not in the paper. I do want to focus on the analytics and make sure they are bulletproof conceptually.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Monday, December 30, 2013 10:54 AM
To: Hilary B. Miller
Subject: Re: Checking In

Excellent. Lets plan on 8:30? I will call you. My goal is to "finalize" at least conceptually what needs to be done analytically so that I can begin the writing process.

One question that I will have - to what extent can we utilize/leverage Danielle's writing and provide her with second authorship. Or, should I start the writing from scratch?

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Monday, December 30, 2013 10:41:52 AM
Subject: RE: Checking In

Yes, back from vacation. Best time for me is tomorrow morning – anytime, you pick.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Monday, December 30, 2013 10:41 AM
To: Hilary B. Miller
Subject: Checking In

Hi Hilary - let me know if you can catch up this week.

Jennifer Lewis Priestley, MBA, Ph.D.
Associate Professor of Statistics
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

EXHIBIT

II

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Thursday, May 1, 2014 3:02:23 PM
Subject: FW: New paper

I'm glad we didn't wait too long to get these comments – they are not that helpful. We're not going to start from scratch. Take what you want from them.

HM

From: Gregory Elliehausen [<mailto:gregory.elliehausen@frb.gov>]
Sent: Thursday, May 01, 2014 3:00 PM
To: Hilary B. Miller
Subject: RE: New paper

My review is attached.

EXHIBIT

JJ

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Tuesday, April 22, 2014 4:00:25 PM
Subject: FW: Priestley - Rollovers

Here are Victor's comments. They are more comprehensive, more oriented toward the analytical presentation, and more useful than Ronald's -- but also more daunting to implement. On reflection, I agree with him regarding the value of reversing the order of the two principal findings. As with the previous comments, view these as suggestions rather than commands. Feel free to email or call him directly if you want to discuss it with him.

I am still awaiting another set of comments from Greg Elliehausen. Based on previous work with him, I don't expect anything soon. If you are comfortable doing so, please dive in with what you've got and we can fill in from there.

From: Victor Stango [<mailto:vstango@ucdavis.edu>]
Sent: Tuesday, April 22, 2014 3:00 PM
To: Hilary B. Miller
Subject: Re: Priestley - Rollovers

Here you go. Let me know if you want to discuss.

From: "Hilary B. Miller" <hilary@milller.net>
Date: Mon, 7 Apr 2014 14:53:22 -0400
To: Victor Stango <vstango@ucdavis.edu>
Subject: Priestley - Rollovers

Victor —

This is a review draft and I would greatly appreciate your comments, as we discussed. Thank you!

Regards,

Hilary

EXHIBIT

KK

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley Ph. D." <jpriestl@kennesaw.edu>
Sent: Thursday, April 10, 2014 10:09:22 AM
Subject: Fwd: Rollover Impact

Here are Ronald's comments. Before you read them, I have some thoughts for you:

1. Many of his comments are short, simple fixes. For example, we need to describe how the lender dataset was selected, how the 29K survivors are representative of the original 37K, and and expand the robustness test of 2 vs 14 days. Easy stuff.
2. Just ignore his comments about Caskey and the big picture question. He doesn't get it. That's not what we sought to study and I don't think it matters as a policy matter anymore.
3. His most important comment relates to Florida. We need to supplement the discussion re 2006 and explain away these results. There is a large unobserved process going on here. Let's talk about how to address that.
4. Let's wait for the remaining comments before we start any drafting.

I appreciate getting these comments from him. As an academic scholar, I'm sure you're impervious to this kind of feedback -- all in the interest of better science. Thanks again for all your hard work on this.

HM

Begin forwarded message:

From: Ronald Mann <rmann@law.columbia.edu>
Date: April 10, 2014 at 4:40:22 AM PDT
To: "Hilary B. Miller" <hilary@miller.net>
Subject: Rollover Impact

Some comments are attached. Standing by to discuss.

--

Ronald Mann
Albert E. Cinelli Enterprise Professor of Law
Columbia Law School
435 W. 116th Street
New York, NY 10027
rmann@law.columbia.edu
[212-854-1570](tel:212-854-1570)

EXHIBIT

LL

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Monday, April 21, 2014 10:28 AM
To: Hilary B. Miller
Subject: Re: Rollover Impact

Hi Hilary -

I went through all of Mann's comments...and provided my thoughts in the attached. I make reference to a v9 of the paper - in the interest of "version control" I can let you be the keeper of the working draft...but I was making some edits in the paper to reflect some of Mann's comments. We can use v9 (I will send later [today](#)) or I can just put them in red and you can pick them up as needed.

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

EXHIBIT

MM

From: "Hilary B. Miller" <hilary@millers.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Monday, May 12, 2014 10:22:35 AM
Subject: Three things

Jen –

1. I am working on an edited version of your paper. I should have it done [today](#). I will send it back to you for your further review, but I think this is very nearly the end.
2. I have spoken with Ronald Mann about some of the default-related issues we unearthed in this database. He is an extremely sharp guy and he would be a great collaborator with you on the “second study,” if you would be interested in working with him. In any event, I would like to share the combined dataset with him. Would you please arrange to send him a link or other means by which he can FTP or download it? His email address is rmann@law.columbia.edu.
3. Finally, since you have mercifully not already done so, would you please bill CCRF for the “first study”? We’ll get that paid right away.

Thanks.

Regards,

Hilary

Hilary B. Miller • Law offices of Hilary B. Miller • 500 West Putnam Avenue - Suite 400 • Greenwich, Connecticut 06830-6096 • voice: ([203](tel:2033991320)) [399-1320](tel:3991320) • fax: ([914](tel:9142063727)) [206-3727](tel:2063727) • hilary@millers.net • [bio](#) • [v-card download](#)

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EXHIBIT

NN

----- Original Message -----

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Saturday, June 7, 2014 4:50:42 PM
Subject: RE: Paper

Will do.

Want to talk to you about the "default" issue and see if we can coordinate with Mann.

Also, need to have you send a copy of the dataset to another consultant who will be using it for a completely unrelated purpose. Will send you details on Monday.

Thanks so much.

Hilary

-----Original Message-----

From: Jennifer Lewis Priestley
[<mailto:jpriestl@kennesaw.edu>]
Sent: Saturday, June 07, 2014 11:24 AM
To: Hilary B. Miller
Subject: Re: Paper

I will defer to you.

If your travels ever bring you to Atlanta, please do let me know. :)

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services

faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/> center
page: <http://www.kennesaw.edu/csas/> what would dagny do?

----- Original Message -----

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Friday, June 6, 2014 6:03:38 PM
Subject: RE: Paper

Jen --

We have not yet provided the paper to the CFPB and would like to continue its embargoed status until the CFPB has had a chance to review and consider it. We are awaiting the right strategic moment to slip it in there. It is, obviously, your paper, but we do not want it to be distributed. I will be happy to send you a "clean" copy in any event.

Hilary

-----Original Message-----

From: Jennifer Lewis Priestley
[<mailto:jpriestl@kennesaw.edu>]
Sent: Friday, June 06, 2014 9:00 AM
To: Hilary B. Miller
Subject: Paper

Hi Hilary,

I trust all is well. I wanted to check in on the status of the paper and to see if I could get a clean (non embargoed) copy.

Thanks. Jen

Sent from my iPhone

EXHIBIT

00

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, June 25, 2014 12:19 PM
To: Hilary B. Miller
Subject: Defaults on Payday Loans

Hi Hilary -

I owe you a huge apology. I had a panic attack [this morning](#) when I realized that I forgot to send this to you before I went away last week. I have also been heads down working with a group of trial lawyers - using social media data to try to predict jury verdicts...I am so sorry that this is so late...

I actually set a grad student loose on the default and payday loan variables to see if he could find something clever. As you will see, his findings are fairly straight forward...as the number of payday loans taken out increases, the probability of a default decreases. In addition, at the end, you will see that vantage scores are lower for people who default.

Sorry again for forgetting to get this over to you. Let me know if you would like to discuss. Jen

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
faculty page: <http://www.science.kennesaw.edu/~jpriestl/>
department page: <http://math.kennesaw.edu/>
center page: <http://www.kennesaw.edu/csas/>
what would dagny do?

EXHIBIT

PP

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, June 25, 2014 12:25:43 PM
Subject: RE: Defaults on Payday Loans

This is useful, but for the most part it answers the wrong question. In the last few paragraphs, it begins to zero in on the issue we care about.

As a reminder, we are not interested in predicting defaults, or in who defaults. Rather, we are investigating whether the fact of having defaulted makes a difference to a consumer's welfare *after* the default. We are making this because the CFPB has asserted that defaults are harmful to consumers, which really seems unlikely given that the consequences of most defaults are that the borrower retains the loan proceeds without being subject to collection action and without any bureau derogatory report.

So, it would be useful to look at changes in credit scores (or other outcome variables, such as delinquencies on other debts, which are likely to be similar) in the time *following* default. Perhaps we could compare these changes with the changes in scores of non-defaulters with similar initial credit scores.

Would you mind taking another stab at this, please? Sorry if we miscommunicated about it.

H

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, June 25, 2014 12:19 PM
To: Hilary B. Miller
Subject: Defaults on Payday Loans

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EXHIBIT

QQ

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, June 25, 2014 12:38:29 PM
Subject: RE: Defaults on Payday Loans

We want to control for non-default factors, which in this context means to me comparing outcomes for defaulters with the outcomes similarly initially scored non-defaulters. I leave the methodology to you.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, June 25, 2014 12:36 PM
To: Hilary B. Miller
Subject: Re: Defaults on Payday Loans

Im on it.

Jennifer Lewis Priestley, MBA, Ph.D.
Professor of Applied Statistics and Data Science
Director, Center for Statistics and Analytical Services
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From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, June 25, 2014 12:36:14 PM
Subject: RE: Defaults on Payday Loans

Yes.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, June 25, 2014 12:35 PM
To: Hilary B. Miller
Subject: Re: Defaults on Payday Loans

This is a mock up (not real data)...is this aligned with what you are thinking?

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From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, June 25, 2014 12:29:37 PM
Subject: RE: Defaults on Payday Loans

I'm sure they are. But that's not the question! The question is whether defaulters have worse declines in credit scores after default than similarly situated non-defaulters.

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Wednesday, June 25, 2014 12:28 PM
To: Hilary B. Miller
Subject: Re: Defaults on Payday Loans

Sure - The pattern that I think is emerging (but I will verify) is that bad credit risks are bad credit risks - across all products. I will be more responsive this time.

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EXHIBIT

RR

Hi Hilary - my 2:00 meeting was cancelled **today** - so I have time to speak **today** between 1:30 and 3:00 if that works better than 9 - 10. Just let me know.

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EXHIBIT

SS

From: "Hilary B. Miller" <hilary@miller.net>
To: "Jennifer Lewis Priestley, Ph.D. (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>
Sent: Thursday, July 24, 2014 9:34:14 AM
Subject: FW: The package has been delivered

Jen –

The subject line is a not-very-secret coded message to reflect that your paper was hand-delivered **this morning** to David Silberman, who is Associate Director for Research, Markets and Regulation at the CFPB. They have known it was coming, I think, but this is their first look. They will likely duplicate and circulate it internally, and your phone will soon start to ring. I am meeting with Jesse Leary, who is their lead economist on payday, at the end of next week, and this will also be a topic for discussion then.

Let's chat briefly when you have a moment, please.

Hilary

From: joisheffield@yahoo.com [<mailto:joisheffield@yahoo.com>]
Sent: Thursday, July 24, 2014 9:14 AM
To: Dennis Shaul; Charles Halloran; Hilary B. Miller
Subject: The package has been delivered

He was appreciative of the manner in which delivered and stated that. He glanced at the first few pages and said he was looking forward to reading it. I made the points you conveyed to me Hilary and told him I hope that this would encouraged the bureau to dig deeper into this area.

EXHIBIT

TT

From: "Hilary B. Miller" <hilary@milller.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Wednesday, November 5, 2014 3:10:44 PM
Subject: RE: Release of paper

Jen –

Sorry I missed your window. Here's what I was calling about:

We received no feedback from the CFPB about your paper. Although they told us they would be calling you with comments and suggestions, apparently they did not. I think it is reasonable to assume that they either have none, or that they want to hold their fire until after the paper is "out" so that they can get a publicity benefit from making their criticisms public. Either way, it is now approaching time to release the paper.

We would like to work with you on the mechanics of release. My question for you is whether your institution will issue a press release regarding the publication of your paper – which we would be happy to draft for their review. Once released, you could put the paper up on SSRN and circulate it to various journals for publication.

Happy to have a call to discuss, but the \$64 question is whether the press release could come from your end rather than ours. We would greatly prefer this approach. The question is timely and important, so it seems that the school might want to crow over it.

Thanks.

Hilary

EXHIBIT

UU

From: "Hilary B. Miller" <hilary@millier.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Cc: "Amy Cantu (acantu@cfsaa.com)" <acantu@cfsaa.com>
Sent: Thursday, November 6, 2014 12:40:30 PM
Subject: RE: Release of paper

Jen –

Here is the final version of the paper in our files.

I have copied my colleague Amy Cantu on this message (her phone number is [\(703\) 842-2092](tel:7038422092)). Amy and I will take a first stab at initial language for a release, which we will then send to you for approval and, assuming you agree, you can show to your media relations team.

We would also like to coordinate a webinar, at our expense, to accompany the release of the paper. So Amy, you and the media relations team will need to coordinate on timing of a number of different steps. The paper should continue to be embargoed until the actual agreed release date.

Thank you so much for your help with this.

Regards,

Hilary

EXHIBIT

VV

From: "Amy Cantu" <acantu@cfsaa.com>
To: "Jennifer Lewis Priestley (jpriestl@kennesaw.edu)" <jpriestl@kennesaw.edu>, tturne88@kennesaw.edu
Cc: "Tammy DeMel" <tdemel@kennesaw.edu>, "Hilary Miller" <hilary@millar.net>
Sent: Wednesday, November 19, 2014 5:21:51 PM
Subject: RE: Press release shell

Dr. Priestley - Attached for your review and consideration is a draft press release announcing your recent study.

Tim - Could we possibly connect again via phone to discuss the mechanics of the release and how we, CFSA and the foundation, can best augment your media outreach efforts?

Thank you,
Amy

Amy Cantu
Communications Director | **CFSA**

515 King St., Suite 300
Alexandria, VA 22314
[703.842.2092](tel:703.842.2092) (direct)
acantu@cfsaa.com

CFSA | www.cfsaa.com

EXHIBIT

WW

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Friday, December 05, 2014 4:18 PM
To: Hilary B. Miller
Subject: Re: Priestley Release Shell

Hilary - can you forward to me the paper with the embargo stamp taken off? I will then load it into SSRN.

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EXHIBIT

XX

From: "Hilary B. Miller" <hilary@millar.net>
To: "Jennifer Lewis Priestley" <jpriestl@kennesaw.edu>
Sent: Friday, December 5, 2014 6:12:18 PM
Subject: RE: Priestley Release Shell

Here it is – both Word and ready-to-upload .pdf format. Please use the abstract verbatim as the SSRN abstract, if you don't mind doing so.

HM

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Friday, December 05, 2014 4:18 PM
To: Hilary B. Miller
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EXHIBIT

YY

Hi Hilary -

I loaded the paper [yesterday](#) - its status is "Under SSRN Review". I don't know how long that takes.

Would you like for me to load the paper in other locations as well? My website? Our Dept website? Forward to Microbuilt? FactorTrust?

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EXHIBIT

ZZ

From: Jennifer Lewis Priestley [<mailto:jpriestl@kennesaw.edu>]
Sent: Tuesday, December 30, 2014 11:26 AM
To: CFPB_ResearchConference
Subject: Paper submission for Conference - Research on Consumer Finance

I am writing in reference to the CFPB Conference - Research on Consumer Finance.

Abstract:

Using payday-lender administrative data matched to borrower credit attributes from a national credit bureau, I find that borrowers who engage in protracted refinancing ("rollover") activity have better financial outcomes (measured by changes in credit scores) than consumers whose borrowing is limited to shorter periods. These results are robust to an alternative definition of a "rollover" that ignores out-of-debt periods of 14 days between successive loans. Also, exploiting interstate differences in rollover regulation, I find that, while regulation has a small effect on longer-term usage patterns, consumers whose borrowing is less restricted by regulation fare better than consumers in the most restrictive states, controlling for initial financial condition. These findings directly contradict key assumptions about this market, raise significant policy questions for federal regulators, and suggest the appropriateness of further study of actual consumer outcomes before the imposition of new regulatory rollover restrictions.

Please find my completed research paper attached.

The paper can also be found on the
SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2534628

In advance, thank you for your consideration.

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Exhibit

AAA

Hilary - I think I am going to submit the paper to this conference:

http://files.consumerfinance.gov/f/201411_cfpb_call-for-papers.pdf

Just wanted to check in with you first.

Have you given to KSU? <http://tinyurl.com/ksuwhyIgive>

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